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CENTRAL FAX CENTER****NOV 22 2006****REMARKS**

Claims 1-3, 5, 7-12, 14-17 and 21-26 are all the claims pending in the application. Applicant acknowledges the Examiner's acknowledgement of the election with traverse of Invention I. Applicant has canceled claims 4, 6, 13 and 18-20 without prejudice or disclaimer. Applicant has added new claims 21-26 to more particularly define the invention. Finally, Applicant respectfully traverses the prior art rejection based on the following discussion.

**I. The Drawing Objection under 37 C.F.R. 1.83(a) and the 35 U.S.C. 112, Second Paragraph Rejection**

In response to the drawing objection, Applicant, as indicated above, has canceled claims 6 and 13 without prejudice, thus obviating the objection.

In response to the 35 U.S.C. 112 rejections, Applicant, as indicated above has amended claims 12 and 15 consistent with the Examiner's comments. Please note, regarding claim 12, Applicant has substituted the chemical name, which is well known in the art, for the trademarked name "Teflon®."

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the drawing objection and the rejections

**II. The Prior Art Rejection**

Claims 1, 2, 6-10 and 14-17, are rejected under 35 U.S.C. 102(b) as anticipated by Kim, et al. ("Kim")(U.S. 6,338,242). Claims 1 and 4, are rejected under 35 U.S.C. 102(e) as anticipated by Wong, et al. ("Wong")(U.S. 7,025,000). Claims

3, 5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim as applied to claim 1.

A. The Rejection Based on Kim

Regarding claims 1, 2, 7-10 and 14-17, Kim fails to disclose, teach or suggest the features of independent claim 1, and related dependent claims 2, 7-10 and 14-17, including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section. (See Page 5, line 8-Page 6, line 6; Page 10, lines 10-18; Page 11, line 7-Page 12, line 10 and Figure 1).

Indeed, Figure 1 of Kim merely teaches a conventional vented rocket motor tube with a thermoplastic warhead adapter for venting gas in order to reduce the danger of explosion for heat induced over-pressurization. In particular, the ordnance venting system 10, in part, includes a rocket motor 12. The rocket motor 12 includes a warhead adapter 20 pressing a dome plug 30 onto a motor tube 40 of a casing 14. On the opposite side of the warhead adapter 20 from the motor tube 40, a warhead 50 is attached. Importantly, the warhead adapter 20 (what the Examiner analogizes to Applicant's adapter) attaches the warhead 50 onto the motor tube 40. Accordingly, the warhead adapter 20 melts during cook-off, which releases the dome plug 30 to vent the motor tube. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Kim invention as disclosing the adapter connecting a rocket warhead section to a rocket fuze section like Applicant's disclosed and claimed invention. Indeed, Kim clearly teaches a warhead adapter 20 connecting a warhead 50 and a motor tube 40 not a rocket

fuze section. (See Column 1, lines 5-20; Column 3, lines 5-45 and lines 63-67; Column 4, lines 17-43; Figure 1 and Office Action, Pages 5, Section 8).

Further, please note, consistent with the above description and function, Kim also discloses that the warhead adapter 20 includes a first portion, which mates with a thread or screw mechanism of the warhead 50, and second portion, which extends along a length of the warhead 50 to be sandwiched between a portion of the motor tube 40 and the warhead 50, not extend beyond the warhead section 50. Thus, this configuration is unlike Applicant's invention as claimed.

In contrast, Applicant discloses an ordnance venting system 10 for a rocket warhead to reduce the danger of explosion from heat induced over-pressurization in the rocket warhead. The ordnance venting system 10 of a rocket 10 includes, in part, a warhead 102, a fuze section 104, a base section 100 and a first adapter 30 situated at the interface between a first connectable end 22 of the warhead 102 and the fuze section 104. A novel feature of this structure is that the first adapter 30 includes a first mating surface 32, which connects to a first attaching means 24 of the first connectable end 22, and a second mating surface 34, which connects to a second rocket section 50 of the fuze section 104. Accordingly, a portion of the second mating surface 34 extends beyond the first connectable end 22 in contact with the fuze section 104, sometimes referred to as the second rocket fuze section 104. Therefore, the unexpected result of the above optimized structural configuration is that the first adapter 30, which possesses a melting temperature sufficiently below the cook-off temperature of the explosive within the warhead, deteriorates, significantly, and structurally fails prior to cook-off. Thus, as the first adapter 30 melts and fails, the rocket fuze section 104 separates and falls away from the

warhead 102 allowing for a release of gas, and a resultant decrease in pressure from within the warhead, which reduces the danger of explosion from heat induced over-pressurization. (See Application, above).

Accordingly, Applicants' invention includes the first adapter for connecting the warhead to the rocket fuze section, whereas Kim only discloses a warhead adapter connecting a warhead and a motor tube not a (second) rocket fuze section to a warhead, let alone, an adapter where a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section.

Indeed, Kim only teaches and suggests that the warhead adapter includes a first portion, which mates with the warhead, and second portion, which extends along a length of the warhead to be sandwiched between a portion of the motor tube and the warhead, not extend beyond the warhead section. Thus, an attempt to substitute Kim's configuration of connecting a warhead and a motor tube could not be used to connect a warhead and fuze section, and permit the fuze section to separate upon heating of the adapter of Applicant's invention. Thus, Applicant's invention is structurally distinct from the conventional Kim structure. (See above).

Therefore, Kim does not disclose, teach or suggest including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section. (See above).

Based on the above, Applicant traverses the assertion that Kim discloses or teaches Applicants' invention of independent claim independent claim 1, and related dependent claims 2, 7-10 and 14-17.

Regarding claims 3, 5 and 11-12, for at least the reasons outlined above, Applicant submits that Kim, alone or in combination, does not disclose, teach or suggest, including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section as recited in independent claim 1, and related dependent claims 3, 5 and 11-12.

Further, please note, Applicant agrees with the Examiner that Kim does not teach or suggest a rocket warhead section including a second connectable end and a second adapter or multiple connectable ends. Applicant also agrees with the Examiner that Kim does not teach or suggest an adapter comprising a nylon material or a Teflon ® material. Applicant, nonetheless, traverses the assertion that Kim's invention having multiple adapters is mere duplication and would be obvious to one of ordinary skill in the art. Indeed, Applicants' inventive is focused, in part, on venting the warhead, and multiple warhead (submunition) sections and related adapters 50A-50F, whereas Kim's invention is configured to release propellant 42 from the motor tube 40. Accordingly, nothing in Kim discloses, teaches or suggests a second connectable end, and a second adapter or multiple connectable ends, for example, as recited in claims 3 and 5. (See Office Action, Pages 6-7, Sections 11 and 12).

Finally, please note, regarding claims 11 and 12, Applicant also traverses the assertion that it would be obvious to use any known equivalent material particularly as the structure, and related function, of Kim, as discussed above, is different from Applicant's invention.

### B. The Rejection Based on Wong

Regarding claim 1, Wong fails to disclose, teach or suggest the features of independent claim 1, (and claim 4 incorporated into claim 1), including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section. (See Page 5, line 8-Page 6, line 6; Page 10, lines 10-18; Page 11, line 7-Page 12, line 10 and Figure 1).

Indeed, Figures 1-5 of Wong merely teach a conventional mechanism for reducing vulnerability of high explosive loaded munitions to unplanned thermal stimuli. In particular, an explosive loaded cartridge 10, in part, includes a threaded fuze adapter 12, a fuze 16, and a projectile body 14. Further, the fuze 16 includes a threaded body 50 with a threaded metal base 42. The projectile body 14 includes a main charge explosive 28 and a threaded opening 32 forward of the main charge explosive 28. Importantly, the threaded fuze adapter 12 is generally a cylindrical ring 200, which includes the interior surface 205 and the exterior threaded surface 210. Accordingly, the threaded metal base 42 is located within a front portion of the projectile body 14 so the threaded metal base 42 is engaged to an interior surface 205 of the threaded fuze adapter 12 (what the Examiner analogizes to Applicant's adapter) while an exterior threaded surface 210 of the threaded fuze adapter 12 is engaged to the threaded opening 32 of the projectile body 14. Based on this conventional configuration, as indicated above, the threaded fuze adapter 12 is situated substantially intermediate the threaded metal base 42 and the threaded opening 32 within the projectile body 14 in order to connect the fuze 16 to the projectile body 14. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Wong invention as disclosing the adapter connecting a rocket

warhead section to a rocket fuze section where the adapter extends beyond the warhead section into the rocket fuze section like Applicant's disclosed and claimed invention. Thus, the Wong configuration is unlike Applicant's claimed invention. (See Wong at Abstract; Column 2, lines 1-50; Column 3, line 25-Column 4, line 65; Figures 1-5; and Office Action, Pages 5-6, Section 9).

In contrast, as discussed above, Applicants' invention includes the first adapter for connecting the warhead to the second rocket fuze section where a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section, whereas Wong only discloses a conventional warhead adapter embedded within the warhead connecting the warhead to the fuze section not extending beyond the warhead section.

An attempt to substitute Wong's fuze adapter 12 configuration, which melts in response to an unplanned thermal stimulus, such as, an exposure to external heat or fire source, but prior to the main charge explosive 28 reaching its auto-ignition temperature, could not be used in place of Applicant's adapter. Indeed, Wong's cylindrical ring fuze adapter could not be used to connect a warhead and fuze section, and permit the fuze section to separate upon heating of the adapter during internal heating of the warhead but also prior to auto-ignition in order to vent the warhead section of Applicant's invention. Thus, Applicant's invention is structurally and functionally distinct from the conventional Wong structure. (See Wong at Column 4, lines 36-65; and, for emphasis, Application, Page 8, lines 3-12).

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Therefore, Wong does not disclose, teach or suggest including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section. (See above).

Based on the above, Applicant traverses the assertion that Wong discloses or teaches Applicants' invention of independent claim independent claim 1.

Finally, for at least the reasons outlined above, Applicant submits that Wong, alone or in combination, does not disclose, teach or suggest, including a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section as recited in independent claim 1.

### III. Formal Matters and Conclusions

In view of the foregoing, Applicants submit that claims 1-3, 5, 7-12, 14-17 and 21-26, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.



Please charge any deficiencies and credit any overpayment to Attorney's Deposit

Account Number 50-1114.

Respectfully submitted,

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